C.I.

## ANNUAL REPORT

TO THE

## CITY OF BIRMINGHAM EDUCATION COMMITTEE

OF THE

### TEMPORARY

# SCHOOL MEDICAL OFFICER

(Lewis Graham, M.S. (Lond.), F.R.C.S. (Eng.)),

FOR THE

## YEAR ENDED 31st DECEMBER, 1915.

In accordance with Circulars 576 and 596 of the Board of Education.

#### BIRMINGHAM:

PERCIVAL JONES LIMITED, TOWN HALL PRINTING WORKS, GREAT CHARLES STREET.

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(LEWIS GRAHAM, M.S. (LOND.), F.R.C.S. (ENG.)),

### FOR THE YEAR ENDED 31st DECEMBER, 1915.

#### INTRODUCTION.

Despite the continuation of the War and all that it entails, throughout the whole of the year 1915 the Committee and Staff of the School Medical Service of Birmingham have endeavoured to obtain the best possible results in the bodily welfare of the children. It is the writer's belief that no instrument exists in the City which does so much towards securing for the State a strong and healthy generation. This generation of children will, more than ever before in our history, require virile strength to make good the wastage of war. What use War's sacrifices with a nation of weaklings as the standard bearer of victory! With this vision ahead the School Medical Service has met difficulties boldly; schemes of reconstruction and consolidation have been carried out and, at the end of the year 1915, the Service stood firmly built, carrying on its great work. So far from curtailing effort, it has been felt that extra effort was required to improve and extend arrangements for dealing with the health and physical well-being of the scholars in the Elementary Schools.

Figures are impotent to record the beneficent work done, but even so, the following tabular statement, with all its limitations, shows that a concrete result has been achieved.

The record of work in figures alone surpasses that of any other year and should give cause for general satisfaction.

Number	r of children	medically	examine	d in sc	hools	 42,757
,,		present				 27,925
,,	spectacle	es prescribe	ed at Cli	nics		 3,821
,,	children	treated at	Dental	Clinic	s	14,542
,,	,,	,,,	X-Ray	Clinic		 248
,,	,,	,,	Tonsil	Clinic		 848
,,	,,	,,	Clinics	for:—	any.	
Ea	rs					
	(a) Wax					 410
	(b) Otorrh					 1,841
Ey	e Diseases —					
	(a) Blepha	ritis				 451
	(b) Conjun					 1,066
	(c) Cornea	l Ulcers				 91

· Nasal Discharge					63
Skin Diseases—					
(a) Ringworm					2,412
(b) Impetigo					3,769
(c) Eczema					465
(d) Sores					569
Superficial Abscesses					277
Septic Wounds					414
Other Complaints					3,053
Number of examinations in	schools	by	Nurses	for	
detection of vermin					140,143

#### REVISED SCHEME OF INSPECTION AND TREATMENT.

The revised scheme of Medical Inspection and Treatment which was described at some length on pages 17 and 18 of last year's report, has been in operation throughout the year. Briefly stated, the scheme involved the visiting of the schools by the Assistant School Medical Officers for inspection purposes at intervals of about a month instead of about once a year, and for a period of half a day instead of about a week; the confinement of such inspections to mornings only; the opening of all the clinics every afternoon; the re-division of the City into eight, instead of seven districts, and the establishment of an eighth clinic. Several weighty reasons were adduced in favour of this plan, and it is pleasing to relate that the scheme has realised all and even more than was expected of it.

### FINDINGS OF MEDICAL INSPECTION AND "FOLLOWING UP."

As in previous years, a table of defects found in the course of Medical Inspection is submitted:—

1.	Eyes:—						
	(a) Vision $(\frac{6}{12}$ or less), all causes						4055
							1194
	(b) Squints (c) Corneal Ulcers, Opacities, and 1	Kera	atitis				297
	(d) Other Eye Defects						729
2.	Ears:—						
	(a) Hearing Defective, all causes						1216
	(b) Otorrhea						762
3.	NOSE AND THROAT DEFECTS :						
	(a) Tonsils or Adenoids						5049
	(b) Other Defects		•••	•••			1625
4.	CHEST:—		***	•••			
	(a) Phthisis—certain						90
	(b) Phthisis—doubtful						284
	(c) Other Lung Diseases .			• • • •			1086
	(d) Heart Disease—congenital						118
	(e) Heart Disease—acquired						510
5.	CHOREA						86
6.	EPILEPSY—including Petit Mal (undo	nht	ed cases)				82
7.	II measure		•••				112
8.	ANÆMIA—marked cases only	•••	•••				319
9.	Speech Defects	•••					285
10.	DEFORMITIES—excluding Paralysis	•••					499
11.	PARALYSIS:—	•••	•••	•••			100
	( - \ TT T ! ]						58
	(b) Torrey Timeles		•••	• • • •			85
12.	SCALP DISEASE :—	•••	•••	• • • •	***	•••	00
	/ a \ Din armana						155
	(1) Other						214
13.		•••	•••	• • •			770
14.	OTHER DEFECTS—including Teeth		•••	••			11582
~ 41	orner Der Berg, Hierdung Teeth		***	•••	•••	•••	-1302

This table by itself would be of little practical value. The real measure of the efficacy of the inspection and treatment lies in the figures which evolve as the result of inquiries made in regard to those cases which require "following up." In order that this may be done in a systematic manner, there have been kept in each school, in charge of the Head Teacher, lists of the children found, on the occasion of the Medical Inspection, to be suffering from an ailment so pronounced as to necessitate the parents being notified and the case being "followed up." These lists are provided with columns, in which, on the occasion of the re-visits, the Assistant School Medical Officer or Nurse enters notes as to the Treatment procured. These sheets are all carefully analysed at the end of the year and the following figures show the results:—

	No. of Defects "followed up" in 1915.	No. of Defects found to be treated.	No. of Defects in course of treatment.	No. of Defects awaiting treatment.	No. of Defects untreated.	"Left School," "Absent," or "No Report available,"
1. Eyes :—						
(a) Vision $(\frac{6}{12}$ or less), all causes (b) Squints	1638 220	797 137	117 3	108 17	201 13	415 50
(c) Corneal Ulcers, Opacities, and Keratitis	11	7			2	2
(d) Other Eye Defects	93	66	8		6	13
2. Ears:— (a) Hearing Defective, all causes	331	144	27	11	46	103
(b) Otorrhœa	204	110	25	3	28	38
3. Nose and Throat Defects:— (a) Tonsils or Adenoids	870	109	11	120	182	448
(b) Other Defects	273	89	26	2	44	112
4 CHEST:— (a) Phthisis—certain	12	8	1		_	3
(b) Phthisis—doubtful	29	13	1	_	2	13
(c) Other Lung Diseases (d) Heart Disease—congenital	167	89 39	15 15	_	13 5	50 41
(e) Heart Disease—acquired	15	9	_	_	2	4
5. CHOREA 6. EPILEPSY—including Petit Mal (un-	13	2	5	_		6
doubted cases)	16	7	3	_	2	4
7. HERNIA 8. ANÆMIA—marked cases only	11 53	3 21	2 17	1	$\frac{1}{2}$	4 13
9. Speech Defects	11	5	1	_	1	4
10. DEFORMITIES-excluding Paralysis	49	18	9	-	5	17
11. PARALYSIS:— (a) Upper Limbs	7	3	1	_	1	2
(b) Lower Limbs	2	1	1	-	_	_
12. SCALP DISEASE:— (a) Ringworm	37	17	9	1	1	9
(b) Other	20	7	7	1	1	4
13. Skin Disease	121 411	$\frac{74}{218}$	21 53	- 1	$\frac{7}{32}$	19 107
14. OTHER DEFECTS	411	210	99	1	34	107

Many of the children have been visited in their homes by the School Nurses and practical demonstrations have been given as to how best to carry out the treatment. Others (see page 1) have been treated in the School Clinics.

Help has been received from the members of Care Committees. They have had referred to them a number of cases where, on the occasion of the second re-visit, children remain untreated. Armed with particulars of the cases, and information as to the treatment to be sought after,

they have visited the homes and used their persuasive powers, often with good results, upon the parents who have been sceptical as to the importance of securing treatment.

The School Attendance Officers, too, by reason of their intimate knowledge of the home circumstances, have been in a position to render valuable assistance, and this in all cases has been cheerfully given. The visit of the Attendance Officer is usually regarded as the last move of a persuasive nature, in the direction of securing treatment for an ailing child.

#### MEDICAL TREATMENT.

The Committee provide treatment for defective vision, defective teeth, ringworm, minor ailments, and enlarged tonsils and adenoids. As in last year's report, these are dealt with in the order named.

#### PRESCRIPTION OF SPECTACLES.

The Committee, the Ophthalmic Surgeons, and the Assistant School Medical Officers are to be congratulated on the reduction which has been made in the list of children waiting to be examined for the prescription of spectacles. It was pointed out in last year's report that pending the adoption of some measures to reduce it, there was a waiting list of some 800 names. This represented about six weeks' work on the part of the Ophthalmic Surgeons and Assistant School Medical Officers, and, as applications for treatment were being received daily as fast as they could be dealt with, it followed that every child had to wait not less than six weeks (frequently more) before the parent's application could be dealt with. In this interval of course the interest of the parents, if not lost, had frequently grown lukewarm, and, as a result, many appointments were made but not kept. However, it has to be recorded to the credit of the Assistant School Medical Officers that a determined effort was made, by each officer prescribing a few extra pairs of spectacles weekly, to reduce the waiting list to reasonable proportions. This extra work was started in March, and by September the list had been so reduced as to permit of the children found in the schools in one week to require spectacles being dealt with at the clinics during the following week, instead of having to wait periods varying between six weeks and three months.

The educational advantage to the children concerned is of course exceedingly great, and this branch of treatment gives cause for considerable satisfaction.

The total number of spectacles prescribed at the Clinics during the year was 3,821, made up as follows:—

Ophthalmic Surgeon		 1,031
Temporary Ophthalmic Surgeon		 419
Assistant School Medical Officer	s	 2,371
7	Cotal	 3.821

The report of the Ophthalmic Surgeon, Mr. Beatson Hird, upon his part of the work is appended:—

The work has been carried on successfully during the year, but the times of attendance had to be altered owing to my being called up for military duty at the Military Hospital in Birmingham. The work hitherto done in the mornings had to be undertaken late in the afternoons, but this seems to have proved an advantage as the attendances have been better, enabling me to get through more work than in previous years.

The total number of new cases seen was 1,201, or 179 in excess of those seen in the previous year. Of these new cases, 987 were found to require spectacles, or 117 in excess of those ordered the previous year. The remaining 214 did not require glasses, but were suffering from inflammatory and other conditions which had been referred to me for advice.

During the year I also saw many children who had been ordered glasses and other treatment previously. The number of these cases seen amounted to 410. or a slight increase on the previous year. The number of old cases is now so large that only those found to require re-testing are seen. The total number of new children who have been seen by me since I began the work now number 3,916.

The analysis of the new glass cases for 1915 works out as follows:—

(1)	Hypermetropia (long sight)	•••	•••	208 or 21 %
(2)	Hypermetropic astigmatism	••	•••	603 or $61~%$
	Total long-sight cases		•••	811 or 82 %

Amongst these were 406 children suffering from squints, forming 41 % of the cases seen requiring glasses.

(3)	Myopia (short sight)		 	36 or 3.6 %
(4)	Myopic astigmatism		 0 847	96 or 9.0 %
(5)	Mixed astigmatism	•••	 •••	44 or 4.4 %
	Total short-sight	cases	 	176 or 17 %

The treatment of the squinting and short-sighted children was carried out on the same lines as in previous years.

Amongst the new cases seen, 80 were suffering from scars on the cornea, more or less impairing vision. They amounted to 6.6% of the total new cases Several of these and some of the bad myopes were referred to the Classes for the Partially-Blind. The pupils at the Whitehead Road School for the Partially-Blind were inspected quarterly, some being sent on to ordinary schools. This school, which was opened last year, is proving of great value.

The old cases seen included children from the Schools for the Partially-Blind, as well as myopes, squints, and others requiring new glasses (to the number of 44).

Treatment was undertaken in a number of cases not requiring spectacles. The total attendances for this purpose was 103, and prescriptions to the number of 35 were given. A number of the children, especially those suffering from squint, were transferred to the General and Eye Hospitals under my care for operations, etc.

During this past year I have made every effort to increase the number of children seen by me, and am glad to know that we have now caught up the arrears. The new central clinic in Great Charles Street has added much to the comfort in doing the work, which had previously been carried out in most unsuitable quarters.

### DENTAL TREATMENT.

There are now six Dental Clinics, that at Floodgate Street having been opened on the 1st March. Five of these are whole time Clinics and the sixth (Great Charles Street) is open every afternoon. As, however, there are two half-time Officers here, the Clinic is equivalent to one of the others.

The following is a summary of the work accomplished:—

No. of individual Children treated. Refused Treat-ment. C7 က က -AT THE SCHOOL DENTAL CLINICS DURING YEAR ENDED Dress-ings. Temp-orary Teeth. FILLINGS. Perman-ent Teeth. Anæs-thetics. 1915. 31st December, Temp-orary Teeth. EXTRACTIONS. Perman-ent Teeth. Over or under 6-8 years. WORK CARRIED OUT AGE. 6-8 years. Girls. No. of Attendances. RECORD OF Boys. : : : : Great Charles Street (Dental Hospital) : Floodgate Street TOTALS : Handsworth ... CLINIC. Fashoda Road Aston ... Greet

It will be noted that about two-thirds of the children treated are between six and eight years of age, and that about two-thirds of the work done has been directed towards the preservation of permanent teeth, which should, of course, be the object to be aimed at. purpose cannot be achieved however, merely by treating children between six and eight years of age, and there leaving the matter. If the expenditure which has been, and is being, incurred on the dental treatment of school children between six and eight years of age is to be justified, then a scheme will have to be devised for the following up and subsequent treatment of such children. The present time, economies are being urged all the way round, is perhaps not opportune to embark upon the consideration of a scheme which may involve considerable expenditure (for this it would do unless a corresponding reduction were made in the number of children treated between six and eight years of age), but it is well to put the situation on record in order that the Committee may know that, in happier times, this is one of the problems which will have to be faced.

#### RINGWORM.

During the year, 2,537 children were treated at the various Clinics for ringworm of the scalp. This disease, which is extremely difficult to eradicate, is responsible for much loss on the part of the scholars and the Local Education Authority. The disease being contagious, it follows that its victims may not attend school. Thus the children concerned suffer a loss of education, and the Education Authority a loss of school attendance grant. Money spent on the cure of ringworm is, therefore, well justified. The arrangement\* made with the Birmingham Board of Guardians for the hire of their apparatus at the Infirmary was continued until May 7th, 1915, when the building was taken over by the Military Authorities. Fortunately, at the end of June it was found possible to hire from the Committee of the Birmingham and Midland Hospital for Skin Diseases their X-Ray apparatus at the Hospital in John Bright Thus there was almost complete continuity of the work. During the whole year the number of cases treated by X-Ray was 248, and, of these, only one required two exposures. One case had been absent from school prior to X-Ray treatment for a period of two years, but the average absence works out at about 18 weeks. The maximum absence after X-Ray treatment was 16 weeks, the average 5 weeks, and the minimum about 3 weeks. Every case treated by the Committee's Radiographer, Dr. Russell Green, is kept under observation by the Assistant School Medical Officer at the District Clinic. Thus the possibility of a recurrence of the infection is safely guarded against. There has been practically no opposition on the part of the parents to the submission of their children to X-Ray exposures.

Reference was made in last year's Report to the installation of X-Ray apparatus in the Great Charles Street Clinic. Various circumstances contributed to prevent the apparatus being actually used in the year 1915, but it is satisfactory to report that, at the time of writing (January, 1916) the apparatus is efficiently installed and Dr. Russell Green has commenced to use it. There are, as a matter of fact, two sets of apparatus, both of which can be controlled simultaneously by the Radiographer with the assistance of a school Nurse. It is hoped that it will be possible to treat about 700 children per annum, working three half-days per week. If, and when, the necessity arises, the number can be increased by extending the number of days for treatment.

#### MINOR AILMENTS.

The treatment of these "Minor Ailments" has been continued through the year. A summary appears on pages 1 and 2. Generally speaking the treatment is of such a nature that it can quite well be carried out by the Nurses, acting under the guidance and direction of the Assistant School Medical Officers. As has been pointed out in previous years, the ailments, although described as "Minor," are frequently followed by more serious troubles, and it is when regard is had to the preventive rather than the curative aspect of this treatment that its importance as a part of the School Medical Service is realised. Not only are children cured of their trivial complaints infinitely more quickly than they otherwise would be, and thus sent to school instead of frittering away their younger days, but they are saved absence from school later in their careers, when a few weeks away from school involves a loss of education which is often irreparable. Moreover, such treatment may be the determining factor in the child growing to a strong as against a weakly adult.

### SCABIES .-- (' ITCH.'')

The opening of the School Clinic at Great Charles Street, with its body baths and shower baths, has paved the way for the more energetic treatment of Scabies. Hitherto there has been the well-nigh insurmountable obstacle that, in the case of many of the children affected with the complaint, the requisite hot baths could not be obtained, and without such baths the treatment of the more persistent cases was very much prolonged. In a number of the more inveterate cases arrangements have been made for the children to receive a hot bath at the Great Charles Street Clinic every other day. After the drying process, sulphur cintment is rubbed in, and clean clothes, which the children bring with them, are donned. Needless to add, each case is treated separately each time it goes, and there is thus no risk of infection being conveyed from one child to another. All the towels, loofals, etc., used in the treatment are carefully sterilised after each child. After the bath, the children are retained in the Clinic for an hour or so, to prevent the possibility of taking a chill, and usually they are provided with a cup of hot milk or tea.

This is a piece of practical work, well worth the labour it entails. The Assistant School Medical Officer reports that already, after less than a month's treatment, a family of children who have been absent from school for six months are cured of their scabies and fit to return.

In this connection it is of interest to point out that there are in existence many undoubted cases of Scabies in the City where the origin of the infection can be traced to the return of the father from the "Front," where he has become infected.

#### TONSILS AND ADENOIDS.

The Tonsil and Adenoid Clinic, and the treatment there carried out, was described at considerable length in last year's Report, and it does not therefore appear to be necessary to dwell at any great length on this phase of the work. During the year 848 children were operated upon, and no untoward incident was reported. The procedure of treatment, and the conduct and management of the Clinic remain unaltered, except for the fact that the operations take place at 5 p.m. instead of 10 a.m.—an arrangement made to permit of the Aural Surgeon performing certain military duties.

The popularity of the Clinic increases rapidly—so much so that the applications for treatment are received much faster than they can be dealt with, and, at the end of the year 1915, there was a waiting list of about one thousand children, representing, at the present rate of progress, roughly a year's work. The matter has been considered by the Hygiene Sub-Committee and, at the time of writing (January, 1916) a proposal to open the clinic for operations on a third day per week awaits the sanction of the Education Committee, who meet at the end of the month. It is greatly to be hoped that the proposal\* will receive the Committee's assent, for there is probably less opportunity (in proportion to the incidence of the defect) to secure treatment for enlarged Tonsils and Adenoids than in the case of any other ailment. This fact no doubt explains in a large measure the length of the waiting list to which reference has been made.

All the children treated have, as hitherto, been kept under observation at the clinic in the district from whence they come.

PRIVACY OF MEDICAL INSPECTION AND EXAMINATIONS FOR VERMIN.

This is a matter which has been the subject of earnest consideration during the year both on the part of the Committee and the staff.

With regard to the routine medical inspection of the children, there is necessarily, when it is remembered that the Assistant School Medical Officers are eight in number, a certain amount of diversity of practice, in consequence of the personal equation. Broadly speaking, however, it is customary for the medical inspection to be carried out in a classroom; occasionally the Teachers' Private Room is used, and, in one school, the Library. Usually some other children and one or two parents are present in the Classroom or the Private Room in addition to the child actually undergoing medical inspection, the Doctor and the Nurse. The actual examination is conducted behind a screen. When so desired, however, arrangements are made for the medical examination of children in the school to be conducted absolutely privately, i.e., only one child and its parent in the examination room at the time with the Doctor.

No child is subjected to routine medical inspection in a school until written notice has been sent to the parents, and it is, of course, competent for the parents, if they so desire, to stipulate for a quite private inspection.

When a child is found to have some defect to which the attention of the parents must be called, such child, if the parent is not present at the examination, is given a printed note—generally by the Assistant School Medical Officer. The note is placed in an envelope which is sealed and marked "Private."

Dealing secondly with the question of the examination for vermin, again there is necessarily some diversity of practice, having regard to the fact that there are seventeen school nurses. Generally speaking, however, it is the custom to carry out the examinations for vermin in a classroom or private room as far as possible, but obviously the School Nurses must do their work in conjunction with, and subject to the convenience of the Head Teachers. The children file past the School Nurse who is seated behind a screen. She looks at their hair to detect the presence of vermin. The notices sent to the parents regarding the

presence of vermin are invariably placed in sealed envelopes which are marked "Private." The method of delivery of this note is that the Head Teachers hand them to the children. In a few cases the nurses hand them, as at the Clinic, but in every instance the delivery of the notice is effected as unobtrusively as possible.

In order to ensure that the Medical Examinations by the Doctors and the Vermin Examinations by the Nurses should be carried out with the greatest possible privacy, the Secretary issued the following circular:—

Circular No. 912, Hy.

#### CITY OF BIRMINGHAM.

Education Office, Council House, Margaret Street, 20th October, 1915.

Dear Sir, or Madam,

PRIVACY OF MEDICAL INSPECTION AND EXAMINATIONS FOR VERMIN.

The Hygiene Sub-Committee have had under consideration the manner in which the medical inspection of children by the Assistant School Medical Officers, and the inspection of the children's heads by the School Nurses, is conducted in the Elementary Schools of the City.

The Sub-Committee understand that in almost all Schools the child actually undergoing medical inspection by the Assistant School Medical Officer is shielded from the sight of other children and parents waiting in the examination room by the use of a folding screen. With regard to the examination of children's heads by the School Nurses for the detection of the presence of vermin, the Sub-Committee are informed that it is customary to carry out this inspection in a classroom or a private room as far as possible, the children as a rule filing past the School Nurse.

I am directed to inform you that the Sub-Committee consider that both in the examination of children by the Assistant School Medical Officers, and the examination of the children's heads by the School Nurses, a screen should be provided, and that every effort should be made to secure as much privacy as possible. In the case of children being examined by a School Nurse for the detection of the presence of vermin, the Sub-Committee consider that the children should file past the examining nurse (who should be seated behind a screen), with a suitable space between the child being actually examined and the next one.

It is quite likely, of course, that in many of the schools there is no folding screen, but a screen adequate for the purpose can readily be improvised by the use of an easel, blackboard and sheet, or other means. I am to request that you will please see that future examinations in your School are carried out on these lines.

Yours faithfully,

JNO. ARTHUR PALMER.

Secretary of Education.

To all Head Teachers of all Departments of Council and Voluntary Schools.

#### THE WORK OF THE SCHOOL NURSES.

The scope of the work of the School Nurses, now seventeen in number, continues to extend, and although each Nurse is primarily connected with a certain district and is required to render assistance to the Assistant School Medical Officer for that district, nevertheless each takes some share in the treatment carried out by the specialist Officers.

For example, four nurses attend the Tonsil and Adenoid Clinic twice weekly to assist the Aural Surgeon and to nurse the children there. Another is allocated for service at the X-Ray Clinic, and the others, in their turn, help the Ophthalmic Surgeons.

The main part of the work of the School Nurses, however, is still that of helping the Assistant School Medical Officers in the medical examination of the children in the schools, and the medical treatment of the children in the Clinics. Within these two divisions there is opportunity for a vast amount of extremely valuable work. The results cannot of course be all tabulated, but they are to some extent reflected in the improved physique and the higher standard of cleanliness of the children. The parents of many of the children have learned to look upon the Nurses as friends rather than officials. From some standpoints the efficacy of the services of a nurse can be measured by the degree of cordiality which exists between her and the parents with whom she is brought into contact. In Birmingham the relationship seems to be of the happiest.

The Nurses have also continued to do valuable work in connection with the detection of verminous children. This is referred to at greater length in the section dealing with that branch of the work.

#### VERMINOUS CHILDREN.

The number of exclusions from school on account of vermin during the year 1915 was 3,138. It was explained in last year's report that there was a feeling on the part of the Public Health and Housing Committe that the work done by the Health Visitors in visiting schools to examine verminous children, and subsequently, the taking of proceedings under the Children Act, ought to be discontinued on account of the procedure being too slow, ineffective and unnecessarily expensive. The Hygiene Sub-Committee finally decided, with the approval of the Education Committee, to make arrangements for the cleansing of Children, under Section 122 of the Children Act, to be carried out by their own Staff, but only as a final step, the usual practice being to exclude verminous children and then proceed against the parents for not causing their children to attend school in a fit and proper condition. actual cleansing of a child was only to take place if, within six months of the parents being fined for a child's non-attendance, such child was again found to be in a verminous condition. It is pleasing to report that this procedure was found to be necessary in one case only during the whole year.

Of the children excluded on account of vermin, 309 had not returned "duly cleansed" within seven days, and in these cases, after inquiry by the School Attendance Officers to ascertain that there was no "reasonable excuse," the Chief Superintendent of School Attendance Officers prosecuted on behalf of the Education Committee for non-attendance. These prosecutions resulted in the infliction of fines, varying in amount from 2s. 6d. to £1.

In one instance the parents of a badly-verminous child were, on the School Medical Officer's evidence, each sentenced to six months' imprisonment with hard labour.

The campaign against vermin does not, however, end here. The School Nurses have visited the various schools systematically throughout the year. About twenty schools per week have been visited on an average; some have been visited frequently, others less frequently, but all have been dealt with according to their needs.

The following table shows the result of these examinations, and the figures for 1914 are added for comparison:—

	No. of Examina-	70	VA.	VER	MIN.	CLEAN.		
Year.	tions.	No.	Per cent.	No.	Per cent.	No.	Per cent.	
1914	152,769	59,159	38.64	12,528	8.2	81,082	53.4	
1915	140,143	51,268	36.58	9,410	6.71	79,465	56.6	

#### EPILEPTIC CHILDREN.

The register of epileptic children has been kept throughout the year, and so far as possible every child has been examined at least twice, or, if circumstances demanded it, at more frequent intervals. At the end of the year the names of 98 children were on the register, compared with, 96 at the end of 1914. During the year 31 names were added to the register, and 29 were removed. Three children were admitted to Institutions for Epileptics and the Committee also assumed responsibility for the maintenance of another child whose parents had removed from another area into Birmingham. At the end of the year the Committee were maintaining twenty epileptic children in Institutions. The accommodation at Monyhull Colony, which the Committee are reserving by agreement with the Birmingham Board of Guardians, is not yet ready.

#### FEEDING OF SCHOOL CHILDREN.

The number of children on the feeding list week by week may be regarded to some extent as an index to the material prosperity of the parents of the children attending the Public Elementary Schools of the City.

The following particulars are submitted with reference to the number of meals supplied to children during the four weeks ended 4th December, 1915:—

	Daily .	Average of	Meals Sup	plied.	Total Number of Meals Supplied.					
Week ended	19	15	193	14	19	15	1914			
	Dinners. Break- fasts. Dinners. Break fasts.		Break- fasts.	Dinners.	Break- fasts.	Dinners.	Break- fasts.			
November 13	93	169	164	4214	650	1167	(a) 1146	29498		
,, 20	104	147	117	3603	728	1032	(b) 819	25220		
27	96	153	118	3300	670	1072	(c) 828	23099		
December 4	92	160	111	3175	646	1121	(d) 777	22222		
Average for 4 weeks	96	157	128	3573	674	1098	893	25010		

<sup>(</sup>a) includes 449 evening meals.

<sup>(</sup>b) includes 266 evening meals.

<sup>(</sup>c) includes 208 evening meals.

<sup>(</sup>d) includes 186 evening meals.

Even more striking is the contrast afforded by comparing the figures for the four weeks ended November 6th with those of the corresponding period in the previous year:—

Week ended		Daily Avera	ge o	f meals	Total Number of meals supplied.			
		1915.		1914.	1915.	1914.		
October	16th .	299	(	9,083	2,090	63,580		
,,	23rd .	301	6	6,663	2,106	46,642		
,,	30th .	293	E	5,935	2,054	41,548		
November	6th .	290	E	5,217	2,031	36,520		
			_					
Aver. for	4 weeks	296	6	5,725	2,070	47,073		
				-				

Admittedly the period in 1914 used for comparative purposes was one of considerable distress, as the breadwinners from many homes had been called up for military service and separation allowances were overdue, but even compared with 1913, a normal peace time, the figures for 1915 show a remarkable decline and point to increased prosperity and ease of circumstances. The daily average of meals supplied during the three school weeks ended 7th November, 1913 (peace time) was 1,108. This figure had fallen to 296 in the four school weeks ended November 6th, 1915 (war time).

The Committee had had under consideration during the latter part of 1914 the question of establishing centres for providing dinners, but, having regard to the extraordinary falling off in the numbers requiring free meals, they came to the conclusion that the time was not opportune for embarking upon a system of dinners for necessitous children over the whole of the City. It was, however, deemed possible to extend the supply of dinners to children attending schools within a reasonable distance of the experimental feeding centre, to which reference was made on page 22 of the Report for the year 1914. It was found that by lining four basket carriages with roofing felt and placing therein cans containing hot soup, etc., which were surrounded with pillows stuffed with hay, the hot soup could be conveyed from the centre to the schools and still remain quite hot on arrival. The cans in which the soup was placed became, practically speaking, a crude form of Thermos flask. By this means hot food was conveyed to Bristol Street, Rea Street, Upper Highgate Street and Fox Street Schools. This experiment demonstrated in a practical manner the fact that the provision of hot meals does not necessarily demand the establishment of special new centres for the cooking of the meals. A scheme developed on these lines could be worked most usefully in connection with the existing cookery centres for the instruction of the older girls. The Committee are alive to the fact that the Cookery Centres offer facilities for the provision of hot meals, and are still considering whether these facilities can be made use of without detracting from the teaching values of the centres.

No change has taken place in the menu during the year.

#### GREAT CHARLES STREET CLINIC.

This building, which was opened by Sir George Newman, Chief Medical Officer of the Board of Education, on September 23rd, 1915, in the presence of a large gathering of interested spectators, represents the completion of a scheme for supplying with a clinic each of the eight districts into which the City is divided for school medical purposes. In

addition to serving the ordinary needs of the district in which it stands, it serves all the other districts for the X-Ray Treatment of Ringworm and also for the treatment of the more difficult eye cases. It was a happy circumstance which enabled the Committee to select for the erection of this clinic a site adjoining the Dental Hospital in Great Charles Street, for here, at the Hospital, the Committee had long been renting the first floor with all its fixtures and using it as a dental clinic. By means of an internal communicating door, on the first floor, access between the two buildings is a very easy matter and practically makes The new Clinic contains two spacious waiting rooms, two doctors' consulting rooms, a room for the treatment of minor ailments, an eye-testing room, an X-Ray room, a store room and two clerks' offices, besides a couple of spare rooms, and two bath rooms each fitted with shower and body baths. It has greatly facilitated the treatment of the children in the centre of the City and has removed the congestion at the Education Office. An interesting feature at this particular Clinic is the provision of cups of tea and small cakes for the waiting patients and their parents. This work is undertaken by voluntary helpers. Wherever possible the recipients are expected to pay a copper, but inability to pay does not preclude a patient from receiving refreshment. The provision of these comestibles often provides an opportunity for "a word in season" on the subject of domestic and personal hygiene, thrift, and economic cookery.

#### INFECTIOUS DISEASES.

The subject of infectious diseases is a wide one, not confined to the Elementary Schools. It is part of the larger problem of Public Health, and, as such, is dealt with in more detail in the Annual Report of the Medical Officer of Health. It may not be without interest, however, to relate the measures adopted for securing that the School Medical Department shall be in possession of reliable information as to the prevalence of infectious disease at any given school. To secure this end the School Medical Department receives daily from the Public Health Department a separate list for each school on the register of which there is a patient suffering from Diphtheria, Scarlet Fever, Whooping Cough, Chicken Pox, Measles or Mumps. These lists also contain the names of "contacts" with any of the diseases named. The numbers of such patients and contacts (not their names) are entered in a register kept in the Medical Department, and at a glance it can easily be ascertained how many children, at any given school, are suffering from, or are in contact with, any of the infectious diseases.

The numbers notified during the year have been as follows:—

								•
	D	ISEASI	С.				PATIENTS.	CONTACTS.
Diphtheria							544	1,094
Scarlet Fever	,			•••			1,937	2,490
Whooping Cough					***		1,165	1,031
Chicken Pox					• • •		3,049	[2,242
Measles							6,012	1,999
Mumps				•••	•••		3,980	2,985
						1		

The notifications, after being registered in the Medical Department, are passed on to the Attendance Department for the information of the School Attendance Officers.

No school has been closed during the year on account of infectious disease.

#### SPECIAL SCHOOLS.

A new plan of visits to the various Special Schools for mentally-defective, physically-defective, deaf, blind, and partially-blind children was rendered necessary by the resignation of Dr. O'Connor in August, 1915. It involved some re-organisation of the work of the School Medical Officer, in order that he might give the time and attention required to these schools.

The work falls into two sections:—

(a) Admission and Periodical Examinations.

(b) Routine Medical Inspection.

Four half-days per week are allocated to work in connection with the Special Schools. One of these (Thursday morning) is given up to the Uffculme Open-air School, and one to various examinations held at the Education Office on Wednesday afternoon each week; the two remaining half-days (Monday and Friday mornings) are spent in the other Special Schools. Further time is devoted to Special Schools' work as required.

Admission Examinations.—These are held at each school twice every term, except in the case of small schools, which are easily kept filled by one examination per term. The second turn for these smaller schools is utilised in connection with the larger schools. Twelve or fourteen children are seen at each examination, so that the waiting lists for each school are kept reasonably full. Many thanks are due to the Head Teachers of the various Elementary Schools who fill up the Forms 306 s.s. for the candidates about to be examined, and to those who, in spite of depleted staffs, never fail to allow one teacher to be present with the children in order to give first-hand information about them. It is now requested that the Medical Inspection Schedule shall be presented at the Admission Examination together with the other form. This procedure has been found in many cases to be of substantial assistance in the diagnosis and prognosis of real or spurious mental defect. For example, a glance at the schedule shows whether the Assistant School Medical Officer has found a child, when it was examined at routine medical inspection, to be deaf or to have defective vision. A child with both, and whose physical defects were unknown to the teacher, is almost inevitably classed as mentally-defective, and yet, mentally, there may, in reality, be nothing wrong.

Besides the cases examined at the schools, Wednesday afternoon at the Office is given up to children who require longer and more detailed examination, such as partially-deaf or partially-blind children, partially-deaf mental-defectives, epileptics and mentally-defective cripples. All "out of school" cases and low-grade imbeciles attend at the Office on this particular afternoon. These need an exhaustive examination, both mental and physical, before being certified as unfit to attend school. This arrangement has proved a practical advantage, for these imbeciles and defectives, who repel the parents of educable mental defectives, do not now go near the Special Schools. In case of any doubt, a child is

sent into school, on trial, as a visitor for a period of a few weeks, and, if found too bad, is certified as incapable of benefit from the instruction given in a Special School, and is then reported to the Local Authority under the Mental Deficiency Act, 1913.

The following is a summary of the results of the examination of children during the year 1915 with a view to their admission to Special Schools:—

			Examined.	Certified.
For	Mentally-defective Schools	S	411	253
,,	Physically-defective School	ls	121	90
,,	Open-air School		101	82
,,	Partially-blind Schools		32	31
,,	Deaf Schools	•••	14	13
			679	469

Of the mentally-defective children examined, 30 were classified as imbeciles and were notified to the Committee for the Care of the Mentally-defective as ineducable. Two of the physically-defective children were similarly diagnosed, and reported as ineducable.

Below will be found the number of children placed at Residential Special Schools during the year:—

,, Schools for the Deaf 2 ,, ,, Schools for Epileptics 3 ,,	en	
,, Schools for Epileptics 3 ,,		
,, School for the Mentally-defective Blind 1 child		

Figures showing the number of known defective children of the City (including Birmingham children placed in Residential Special Schools in different parts of the country) are given in the following table:—

#### NUMERICAL RETURN OF DEFECTIVE AND EPILEPTIC CHILDREN.

Blind (including partially-blind).  Attending Public Elementary Schools 2 3 5  Attending Certified Schools for the Blind or Partially-blind 63 64 127  Not at School 3 4 7  Deaf.  Attending Public Elementary Schools				Boys.	Girls.	Total.
Attending Certified Schools for the Blind or Partially-blind          63       64       127         Not at School          3       4       7         Deaf.   <	Blind (including partially-blind).					
Partially-blind          3       4       7         Deaf.	Attending Public Elementary	Schools		$^2$	3	5
Partially-blind          3       4       7         Deaf.	Attending Certified Schools	for the	Blind or			
Not at School          3       4       7         Deaf.       Attending Public Elementary Schools				63	64	127
Attending Public Elementary Schools       —       —       —       —         Attending Certified Schools for the Deaf       78       69       147         Not at School        1       —       1         Mentally-defective.         20       9       29         Attending Public Elementary Schools         577       405       982         Not at School          3       1       4         Imbeciles or Idiots—not at School        62       77       139         Epileptics.         Attending Public Elementary Schools        50       48       98         Attending Certified School for Epileptics       10       10       20				3	4	7
Attending Certified Schools for the Deaf        78       69       147         Not at School          1       —       1         Mentally-defective.          20       9       29         Attending Public Elementary Schools           577       405       982         Not at School           3       1       4         Imbeciles or Idiots—not at School         62       77       139         Epileptics.        Attending Public Elementary Schools        50       48       98         Attending Certified School for Epileptics        10       10       20	Deaf.					
Attending Certified Schools for the Deaf        78       69       147         Not at School          1       —       1         Mentally-defective.          20       9       29         Attending Public Elementary Schools           577       405       982         Not at School           3       1       4         Imbeciles or Idiots—not at School         62       77       139         Epileptics.        Attending Public Elementary Schools        50       48       98         Attending Certified School for Epileptics        10       10       20	Attending Public Elementary	Schools				
Not at School          1       —       1         Mentally-defective.          20       9       29         Attending Public Elementary Schools of the Mentally-defective           577       405       982         Not at School           3       1       4         Imbeciles or Idiotsnot at School         62       77       139         Epileptics.        Attending Public Elementary Schools        50       48       98         Attending Certified School for Epileptics        10       10       20				78	69	147
Mentally-defective.       20       9       29         Attending Public Elementary Schools       20       9       29         Attending Certified Schools for the Mentally-defective       577       405       982         Not at School       3       1       4         Imbeciles or Idiotsnot at School       62       77       139         Epileptics.         Attending Public Elementary Schools       50       48       98         Attending Certified School for Epileptics       10       10       20				1		1
Attending Public Elementary Schools       20       9       29         Attending Certified Schools for the Mentally- defective         577       405       982         Not at School          3       1       4         Imbeciles or Idiotsnot at School        62       77       139         Epileptics.         Attending Public Elementary Schools        50       48       98         Attending Certified School for Epileptics       10       10       20						
Attending Certified Schools for the Mentally-         defective		Schools		20	9	29
defective          577       405       982         Not at School          3       1       4         Imbeciles or Idiots—not at School        62       77       139         Epileptics.         Attending Public Elementary Schools        50       48       98         Attending Certified School for Epileptics        10       10       20	Attending Certified Schools	for the I	Mentally-			
Imbeciles or Idiots—not at School 62 77 139  Epileptics.  Attending Public Elementary Schools 50 48 98  Attending Certified School for Epileptics 10 10 20				577	405	982
Imbeciles or Idiots—not at School	Not at School			3	1	4
Epileptics.  Attending Public Elementary Schools 50 48 98  Attending Certified School for Epileptics 10 10 20		chool		62	77	139
Attending Public Elementary Schools 50 48 98 Attending Certified School for Epileptics 10 10 20						
Attending Certified School for Epileptics 10 10 20		y School	ls	50	48	98
	Attending Certified School for	or Epilep	tics	10	10	20
Physically-detective.	Physically-defective.					
Attending Certified Schools for the Physically-		or the Pl	hysically-			
defective 127 99 226				127	99	226
Attending Open-air School 50 75 125				50	75	125

Periodical Examinations.—These are held for the purpose of passing out from the Special Schools children qualified by age and attainments and for excluding such children as, having received considerable attention, are not capable of improvement. Such an examination is held at every Special School once in six months. The first two Fridays of each month are now used for this purpose, and in consequence of this rotation, rush and pressure are avoided at any particular time of the year. Every child in the schools for mental defectives is examined by the Assistant Superintendent of Special Schools, and those to be seen by the School Medical Officer are submitted to him, in order to ascertain which children should be put under permanent care. No child is allowed to leave School without having been seen by the School Medical Officer. Permission to leave has been granted on much the same basis as in former years, except that, owing to the present abnormal conditions and to the ease with which children can obtain employment, some have been allowed to leave who would normally have been retained for a further year. This, of course, does not apply to the children recommended for permanent care. No child has been considered fit to be transferred back to an ordinary elementary school during the last eighteen months. Since the passing of the Mental Deficiency Act, 1913, the Local Authority under that Act has become responsible for all children incapable of being instructed in a Special School. relieves the Education Committee of the necessity of retaining such children in school. A careful investigation has been made during the last term with a view to ascertaining which children are not improving at all. Only those who were over 11 years of age, who had been more than four years in school, and who were still in and likely to remain in the lowest class, were considered. Of these, 10 were retained in school, and 10 have been excluded and reported to the Local Authority. This course was rendered particularly urgent, owing to the fact that over 600 children had been reported to be examined with a view to their transfer from the ordinary elementary schools, and that owing to the present cessation of Special School building operations it seemed otherwise impossible to reduce the waiting list. Now, in consequence of this winnowing process, a few more children will be given the benefit of spending some time at a Special School. Some of the names had been on the Waiting List for admission more than four years.

The Open-Air School.—Every Thursday the School Medical Officer visits Uffculme, examining and giving advice about the children there. Once during each term a Periodical Examination is held to consider which children have sufficiently improved in health to be able to resume attendance at Ordinary Elementary Schools. During the year 1915, 56 children were passed out. The children who have returned to the Ordinary Schools are medically examined three months after the transfer, and again six months later, in order to see whether the improvement in health and physique has been maintained. Summaries of these examinations during the past year are given below:—

After 3 months' attendance at Ordinary Elementary Schools.

Satisfactory ... ... 23 or 63.9 per cent
Fairly satisfactory ... ... 9 or 25.0 ,,
Unsatisfactory ... ... 4 or 11.1 ,, \*

36

<sup>\*</sup> All these cases were re-admitted to Uffculme.

After 9 months' attendance at Ordinary Elementary Schools.

Satisfactory ... ... 26 or 52.0 per cent.

Fairly satisfactory ... 11 or 22.0

Unsatisfactory ... 13 or 26.0 ,, \*

50

Vacancies are promptly filled from the Waiting List, which is kept ready by examining entrants in small batches rather than devoting a whole morning to their certification as formerly. A few children are summoned to the Open-air School on Thursday morning, and a few to the Education Office on Wednesday afternoon, whenever the Waiting List becomes somewhat depleted.

Routine Medical Inspection.—Every child in the Special Schools is medically inspected once in two years, so that half of the children in each school are inspected in any given year. Instead of the Medical Officer examining all the cases due in a certain year during a given week, a small number of children are inspected at each visit to a school in much the same manner as under the re-organised scheme of Medical Inspection in ordinary Elementary Schools. By beginning half-an-hour earlier than formerly, ten children are medically inspected before each Admission or Periodical Examination begins; thus 60 children can be seen at each school each year. In the larger schools, an extra half-day is given entirely to Medical Inspection once a year, when 30 extra children are seen, thus keeping abreast of the constant influx of new pupils. This plan aims also at the least disorganisation of the school, and distributes the clerical work of the Head Teacher over a long period. It also provides opportunity for the more frequent examination of special and ailing children.

In the Schools for the Deaf and Partially-blind and at the Blind Institution, where the numbers are small, the routine Medical Inspection resolves itself into one regular half-day and a short following-up visit each term.

Medical Treatment.—During the year, arrangements have been made for the children attending the Special Schools to receive Dental and Medical Treatment in precisely the same manner as their fellows in the ordinary Elementary Schools. Hitherto a number of Special School children have taken part in the advantages which are offered by the Clinics, although they have not been dealt with systematically. Now, however, the treatment is not of a casual nature; it is placed on an organised basis, and the initiative is no longer left with the parents. The defect from which a child is suffering is pointed out to the parents by means of the same printed forms as are used in the ordinary Elementary Schools, and they are invited to consent to the child's treatment. This consent having been obtained, the modus operandi is similar to that obtaining in the Elementary Schools.

The School Dental Surgeons now visit the Special Schools once a year, or more often if necessary, and examine the teeth of *all* the children—not only those between six and eight—to ascertain which are in need of treatment. The numbers of children who have attended the dental clinics testify to the real need which has existed.

Mentally-defective children in need of spectacles are dealt with by the Ophthalmic Surgeons, as the prescription of suitable glasses in these cases is infinitely a more difficult matter than in the case of the normal school child.

The campaign against vermin has also been carried into the Special Schools. The Nurses employed in the Elementary Schools visit the Special Schools for the Mentally-defective, Deaf, and Partially-blind at regular intervals, and carefully examine every child. In the Schools for the Physically-defective, the same work is done by the Nurses employed at those schools. Where necessary, the Cleansing Attendant also visits the Special Schools.

In short, the Special Schools, in addition to receiving that medical oversight which their purpose demands, are now embraced within the machinery for the routine medical inspection and treatment of children which has been built up since the passing of the Education (Administrative Provisions) Act, 1907.

This section of the report would be incomplete without a reference to the unfailing help which has been forthcoming from the Assistant Superintendent of Special Schools since the resignation of Dr. O'Connor. This has been of great value to the School Medical Officer, and he here places on record his thanks.

#### MISCELLANEOUS WORK.

During the year the School Medical Officer has medically examined: 108 Intending Teachers,

71 Bursars,

111 Pupil Teachers, and

65 Student Teachers.

He has also reported upon or examined the following:-

#### Teachers.

Examinations					28
Reports re absence, infectious disease		re co	ntact	with	119
Caretakers.					
Examinations	 				4
Reports	 	• • •			3
Other Employes.					
Examinations	 				2
Reports	 				3

The Remand Home has also been visited several times for the purpose of examining mentally defective children, or children committed to industrial schools.

Many children have also been referred from the Clinics for special examinations.

For a part of the year—from January to the end of August—the Temporary School Medical Officer, in addition to his duties as such, acted as an Assistant School Medical Officer in one of the eight districts. At the end of August, the Superintendent of Special Schools, an officer appointed five years before the passing of the Education (Administrative

Provisions) Act, 1908, resigned, and her duties were undertaken by the Temporary School Medical Officer, who then relinquished his duties as an Assistant School Medical Officer.

#### CONCLUSION.

In conclusion the School Medical Officer records his gratitude to the Hygiene Sub-Committee for the keen insight and sympathy of its members with the real meaning and value of the School Medical Service.

He feels that his professional colleagues and the nursing staff are at one with him in believing that the work is of great value to the citizen of the future, and he is satisfied that their efforts have been commensurate with the greatness of the task they are privileged to undertake.

Finally, without the efficient help of the clerical staff, much time would be wasted by the Medical Officers in administrative matters. To the Chief Clerk the writer expresses his thanks for the valuable help received from him during the year in matters of administration, and regrets that when he is shortly called to the colours, the Birmingham School Medical Service will lose its last male member who has worked in it since its inception in 1908.



